

Title (en)
GLASS ANTENNA FOR CIRCULARLY POLARIZED WAVE RECEPTION

Title (de)
GLASANTENNE FÜR ZIRKULAR POLARISIERTEN WELLENEMPFANG

Title (fr)
ANTENNE EN VERRE POUR RÉCEPTION D'ONDES À POLARISATION CIRCULAIRE

Publication
EP 3806237 A4 20210728 (EN)

Application
EP 19806458 A 20190509

Priority
• JP 2018100104 A 20180525
• JP 2019018480 W 20190509

Abstract (en)
[origin: EP3806237A1] Provided is a glass antenna having an improved circularly polarized wave reception bandwidth in a frequency range from 1 to 2 GHz. The glass antenna has a core-side feeding part, a ground-side feeding part arranged adjacent to the core-side feeding part, a first element extending from the ground-side feeding part, and a parasitic element including a first wire, a second wire arranged parallel or substantially parallel to the first wire and a third wire connecting the first and second wires. The parasitic element is disposed to surround the core-side and ground-side feeding parts between an edge of a metal body part adjacent to the core-side and ground-side feeding parts and the third wire. A blank portion is provided between the parasitic element and the first element such that the parasitic element and the first element allow resonance with a radio wave in any arbitrary frequency band within the frequency range.

IPC 8 full level
H01Q 1/22 (2006.01); **H01Q 1/32** (2006.01); **H01Q 21/24** (2006.01); **H01Q 21/30** (2006.01)

CPC (source: EP US)
H01Q 1/1271 (2013.01 - EP US); **H01Q 1/325** (2013.01 - US); **H01Q 5/378** (2015.01 - EP)

Citation (search report)
• [XAI] JP 2013198090 A 20130930 - PANASONIC CORP
• [E] EP 3611795 A1 20200219 - CENTRAL GLASS CO LTD [JP]
• [A] KR 20110105724 A 20110927 - ASAHI GLASS CO LTD [JP]
• [A] JP 2011151624 A 20110804 - HARADA IND CO LTD
• See references of WO 2019225321A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3806237 A1 20210414; **EP 3806237 A4 20210728**; CN 112166527 A 20210101; JP 7231852 B2 20230302; JP WO2019225321 A1 20210527; US 11563263 B2 20230124; US 2021203055 A1 20210701; WO 2019225321 A1 20191128

DOCDB simple family (application)
EP 19806458 A 20190509; CN 201980035080 A 20190509; JP 2019018480 W 20190509; JP 2020521145 A 20190509; US 201917058476 A 20190509